

# Digital Food Ordering System for Restaurants

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**Abstract-** *The recognition of restaurants is ever increasing. Accordingly, the wide variety of restaurants has elevated too. Taking gain of the advancement in technology, this assignment objectives to use a virtual touch to the way eating places function, in order to increase its recognition amongst customers. This paper ambitions at replacing the traditional food ordering device in eating places with tablet food ordering. The customer, on getting into the eating place and occupying his desired table, may be welcomed with a tablet constant at his table. He will then pick out his desired meal and his showed order will be sent directly to the kitchen. Once his meal is ready, it could be introduced by means of the waiters to the corresponding table. The consumer can publish his feedback relying upon his experience. The client's login credentials and order history are saved in a vital database. This answer quickens the meals ordering technique and is likewise an attractive, error loose method way to the digital factors involved.*

**Indexed Terms-** *Android, Feedback, LCD, Login, Offers, Tablet*

## I. INTRODUCTION

Popularity of eating places has extended in current years. The standard exercise in a eating place includes the purchaser making his order and awaiting the ordered meal. However, the complaints received from clients concerning services presented in eating places has multiplied too. This feeling of dissatisfaction is caused by many reasons, specifically, delay in delivering customer's order. Advancement in conversation technologies can be used to remedy those issues. Accordingly, this examine aims at removing the limitations in the meals ordering system, with the assist of an incorporated and networked machine. This examine

includes the use of drugs for assignment the food ordering process in restaurants. In definition, it's far an incorporated device, evolved to help customers make their orders greater without difficulty and efficiently. It additionally ambitions at dashing up the meal serving system. The consumer will first input the eating place. The table he shall occupy could have a tablet constant to it. The pill will include the overall facilities provided via the particular eating place namely menu, offers, modes of payment, etc. The customer can select among the types of meals available at the restaurant. His choice will be despatched to an LED screen placed inside the kitchen making the cooks privy to the patron's choices. The chefs thereby prepare the requested meal that's served to the customer by way of the waiters. Once the customer finishes his meal, he will be shown his total invoice amount which he can pay through cash or card. The supervisor keeps record of the table's total invoice. He additionally acts as an admin. This venture deals with pill meals ordering system for restaurants. This topic consists of scope of the mission, existing environment, proposed environment and design and implementation constraints. Scope of the project includes features that may be implemented.

## II. LITERATURE SURVEY

The current gadget is paper based. Papers are used in eating places for showing the traditional menu cards, writing down the orders of customers, storing the information of customers. The disadvantage paper-based gadget is that papers can get effortlessly damaged through stain marks, they can be lost due to fireplace or accidents or can wander off in general. Hence, time and money is wasted. As conventional menu playing cards are paper based, any adjustments that need to be made in the menu will require reprinting of the complete menu card, main to wastage. For small adjustments, reprinting the entire

menu card is impossible. Changes in the menu card can not be made dynamically. It is inefficient to get right of entry to a particular document from the stack of papers. This system is time consuming. One has to call a waiter quantity of times till he notices it, and await him to arrive at their desk to take their order. Also, the waiter can misread the customer's order since he's writing the order on paper, and the case of serving a wrong dish is possible. The management of restaurants has advanced with time. Each waiter is assigned a collection of tables, and after taking orders for a table, the waiter enters the order (listing of meals, drinks ordered via the purchaser or a group of customers) into the machine at the PC. The waiter commonly has an idea of the dishes which can be unavailable earlier than taking an order. The system must confirm the supply of dishes. If a food item isn't available, PDA systems additionally did not offer any actual time feedback from customers. Menu playing cards inside the PDA's were not appealing and uninformative because it did no longer guide images.

### III. AIMS

This machine pursuits at increasing the pleasant and speed of service. This machine also pursuits at growing appeal of region for huge variety of clients. In present day formal eating environments, some form of bodily static menu is utilized to carry the to be had meals and beverage alternatives to customers. Said menus are generally paper based and subsequently impose restrictions on the textual actual estate available and the potential a restaurateur has to replace them. This record specifies the requirements for a restaurant paper menu and ordering replacement method to relieve the troubles associated with the contemporary archaic method. Implementing this system Starters and main course orders are normally taken together. Drinks and dessert orders can be taken separately. The chefs inside the kitchen can view the dish orders on their display, prepare them in the best order and affirm coaching to the device when complete, further with the bar. When a waiter sees the completion indication on his terminal, he collects the meals/drinks/cakes and takes them to the table. The waiter can also test on the reputé of dish and drink orders. At the end of the meal, the waiter orders the gadget to print the total invoice and he enters the payment details for it. The management has the

selection of giving discounts. The gadget keeps records of the numbers of clients served with the aid of each waiter and the amount of money taken by way of them. These statistics can be viewed by means of the management. The next development was "QORDER". It is a portable ordering machine for Android devices. Here the waiter procedures the purchaser's desk with the QOrder, a hand-held device, rather than the conventional notepad. He makes use of the touch screen to go into the order statistics and then sends it to the kitchen in actual time for processing. Simultaneously, the POS system gets the sales facts for the cause of billing. QOrder makes use of WIFI to without difficulty access every corner of the restaurant, encompassing all the tables establishes within. Once the client wishes to leave, the waiter makes use of his belt printer to print the receipt and strategies fee with the hand-held unit similar to he would on the POS machine. But there are nevertheless many regions which require serious attention. Like, making dynamic changes within the menu card, to dispose of the heap of paper-based totally statistics, to guarantee the consumer that he'll be served with what he has ordered, to report the patron feedback. Some of the existing systems are referred to below: - Pixel Point PAR Pixel Point Company makes use of this software program for eating place control. The gadget consists of the company's hardware and software. This network machine is TCP/IP compatible, enabling sending of information via both wireless and conventional networks. - LRS Restaurant Server Pager Starter Kit This system reduces the ready time of customers and improves the food-ordering service quality in restaurants. The on-web page paging device for sending the order facts is used at UHF frequency or the frequency variety of 467 MHz. - Implementation of Network-based totally Smart Order System the Smart Order System in Restaurants (SOSIR) has been changed to take order from the client's table through RS-232 signal, which is sent to the cashier counter. The cashier counter device is connected to a database. When the clients' orders are sent the cashier counter system will display and prioritize the orders earlier than sending the records to the kitchen for the chef to cook. Personal Digital Assistant (PDA) primarily based systems A range of wi-fi structures like WOS, i-menu, FIWOS had been developed while new technologies and processes

being introduced to automate the food ordering offers a cost-efficient opportunity to provide the customers a personalized service experience wherthey are in control selecting what they want, whilst they need it – from eating ordering to payment and feedback.

#### IV. OBJECTIVES

There must be a tablet on every table.

- This will permit the clients to browse the food items for the time they wish.
- Customer feedback: - Customer ought to be able to input the comments about the carrier and the meals served.
- This allows the Restaurant proprietor to analyses the carrier and make necessary changes if needed.
- This also helps the Customers to decide a selected meals object with a high quality feedback.
- Searching Item: - Customer must be able to search a specific meals object in step with name, price, category etc.
- This saves quite a few time of patron to order an object.
- Offers for Customer: - The Restaurant proprietor can post diverse gives on tablet.
- This will assist the purchaser in addition to the eating place owners.
- Attractive Presentation: - The Menu should be organized in an attractive way with appropriate imagery.
- Sorting an Item: - The food gadgets should be sorted according to price, season and user rankings.
- This enables the client to discover or pick a food item which has a great rating and which is liked by way of a many consumer.
- This also enables the Restaurant owner to make changes in a selected meals object if it has low rankings which improves the best of food.
- The menu can be modified through the Kitchen manager.

#### V. PROPOSED SYSTEM

This document specifies the requirements for a restaurant paper menu and orderingreplacement strategy to alleviate the problems associated with the

current archaic method, by replacing paper menu with an electronic medium i.e. a digital tablet.

- Due to a digitalized system, the risk of manual errors is eliminated, thus eliminating the communication barrier.
- The tablet displays all the information the customer needs to know about the order he has placed
- The Manager is the admin of the overall digital system. Hence, he can update the menu from time to time since he has access to all the tablets placed in the restaurants.
- In tablet food ordering system, the tablet has ample space to accommodate numerous advertisements in an appealing fashion, thus contributing to the income received the restaurants.
- One-time investment in tablets eliminates the need of waiters in the order placing procedure.
- Valuable customer feedback regarding overall quality of the restaurant can be obtained.
- Knowledge of offers available in a particular restaurant can be known by any customer around the world due to access to project website.
- Tablet food ordering system gives complete description of the respective food item like image content, ingredient description etc.

#### VI. SYSTEM ARCHITECTURE

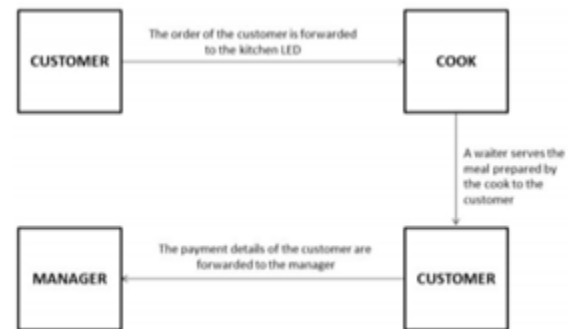


Figure. 1: Architecture

- The customer first enters the restaurant. He occupies the desired table. Every table has a tablet fixed to it. The tablet consists of android software which assists the customer in his food ordering procedure. It has various sections like offers, menu, modes of payment, feedback etc.

- The customer is greeted with a welcome screen on the tablet. He can use the tablet as a guest or can login into his account.
- Once he has logged in, he can view his previous transactions in the restaurant. He can then browse through the offers section, if any, and select any desired offer he wants to.
- The customer can browse through the menu and select his desired food items. Once he's done, he can confirm his order.
- His order is transferred directly to the LED screen placed in the chef's kitchen.
- The chef then cooks the meal and sends a confirmation signal to the waiter. The waiter then collects the meal and dispatches it to the corresponding table.
- Once the customer finishes his meal, he has the option of providing feedback. The feedback of one customer helps the new customers to decide their orders.
- On completion of the above procedure, the customer is then shown his total bill in the 'Payment' tab. The Payment tab consists of two choices, Cash or Card. If the customer wishes to pay via cash, he is required to provide the respective amount to the waiter. If he wishes to pay via Card, he is required to complete his transaction at the manager's table by swiping his card.

VII. ALGORITHM

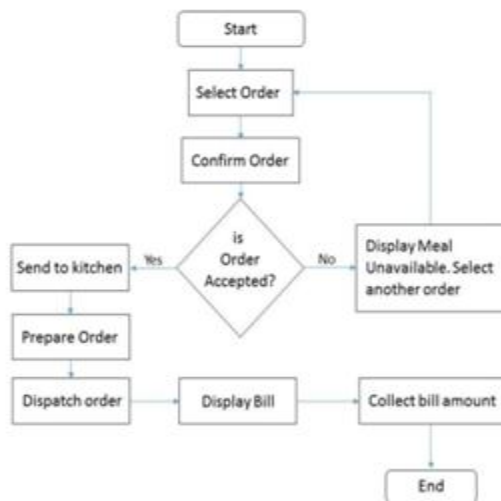


Figure. 2: Proposed Algorithm

CONCLUSION

Thus the need for tablet food ordering is analyzed and its advantages over the traditional food ordering system in restaurants are studied. It is concluded that the proposed tablet food ordering system is time saving and error free as compared to the traditional system.

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